

Summary of the Deliberations of the DEQ Nutrient Criteria Affordability Advisory Group

DEQ Convening

DEQ created and convened the Nutrient Criteria Affordability Advisory Group in September 2008 to provide it advice regarding affordability criteria for surface water quality nutrients standards that address nitrogen and phosphorus. It did so because the Department was in the process of developing proposals for nitrogen and phosphorus water quality standards that would likely be set at low levels that may cause hardships for public and private entities that require discharge permits. DEQ hired a consultant (ICF International) in 2006 and 2007 to provide recommendations as to the most appropriate method for evaluating the affordability of numeric nutrient standards. As part of the two reports completed for DEQ, ICF recommended that DEQ convene a workgroup to refine aspects of existing U.S. Environmental Protection Agency (EPA) guidance. DEQ chose the members of the group to be representative of the interests in the affordability criteria, and that could provide expertise on the subject matter. The initial voting and non-voting members selected were as follows.

Voting Members

Tim Burton, Manager, City of Helena
John Wilson, Public Works Director, Town of Whitefish
Dick Hoehne, Public Works Director, Town of Philipsburg
Earl Salley, Water Pollution Control Advisory Committee
Jim Jensen, Montana Environmental Information Center
Don Allen, Western Environmental Trade Association
Brianna Randall, Clark Fork Coalition
Jim Edgcomb, Regulator of Affordability, Montana Department of Commerce
Scott Murphy, Wastewater Engineer, Morrison-Maierle Inc.
Dave Aune, Wastewater Engineer, Great West Engineering
Dude Tyler, Real Estate/Developer

Non-Voting Members

Todd Teegarden, Bureau Chief, DEQ Technical & Financial Assistance Bureau
Dr. Jeff Blend, Economist and Energy Analyst, DEQ Energy and Pollution Prevention Bureau
Dr. Michael Suplee, Environmental Science Specialist, DEQ Water Quality Planning Bureau

In February 2009, DEQ added two members to the group, Debbie Shea representing the Montana Mining Association and Terry McLaughlin representing Smurfit-Stone Container Corporation.

DEQ hired Gerald Mueller of Consensus Associates to facilitate the NCAAG.

Ground Rules

At its initial meeting in September 2008, the NCAAG unanimously adopted ground rules with provisions addressing group membership, purpose, and decision rule, and the role of its facilitator. Regarding the decision rule, the group decided to provide advice to DEQ based on a majority vote of its members. Dissenting views were to be noted by the group facilitator.

NCAAG Meetings

The group met five times from September 2008 through March 2009, and a sixth meeting was scheduled for April 2, 2009. Mr. Mueller prepared summaries of the meeting; the summaries are available from DEQ. Don Allen and Dude Tyler did not attend any of the NCAAG meetings.

Issues Addressed

DEQ asked NCAAG to consider separate criteria for affordability variances from nutrient standards for public and private entities.

Public Entities

For public entities, such as municipal waste water utilities, DEQ proposed a process recommended by the EPA for triggering an affordability variance. The first step was a screening process, the Municipal Preliminary Screener, in which the ratio of total pollution control cost per household to median household income (MHI) is calculated. This screener defines a threshold which determines if the community could then pass to the subsequent steps in the evaluation process. The subsequent steps determine whether the waste treatment improvement costs would result in both substantial *and* widespread economic impacts. Communities that do not advance beyond the Municipal Preliminary Screener are considered to be able to afford to meet the water quality standards and, therefore, would not be eligible for a variance.

Municipal Preliminary Screener - NCAAG discussed the threshold value for the screener. In addition to the screener as originally defined by EPA, NCAAG members added another component, so that the Municipal Preliminary Screener now has two parts. Added to the screener was a test that examines the proportion of individuals in the community in question falling into the low-to-moderate (LMI) income bracket (per LMI definitions used by the Montana Department of Commerce). This addition assured that communities with skewed income structure (i.e., a large proportion of both lower-income and high-income citizens, but few middle-income citizens) would be properly and fairly evaluated. In the new, two-part configuration of the Municipal Preliminary Screener, communities that would pay more than 1% MHI, or that have a proportion of citizens with a high LMI (>62%) regardless of the % MHI, would be eligible to be further considered for a variance via the subsequent steps in the substantial and widespread evaluation.

Substantial and Widespread Impact Test - NCAAG members considered in detail the content of the substantial and widespread tests to determine whether the additional treatment costs necessary to comply with nutrient standards would result in a substantial and widespread impacts. In applying these tests all members participating in the October 11, 2008 and the November 19, 2008 meetings agreed to the following:

- The evaluation should be based on the costs of the upgrade to the wastewater facility collection, treatment, and disposal system.
- The area included in the evaluation for the substantial test would be the governmental jurisdiction responsible for paying compliance costs. If only a proportion of the community is served, only those who pay are the affected community; however, if such fine-resolution data are not available, then data for the whole community may be used instead.
- The area included in the evaluation for the widespread test would be the geographic area where direct project costs pass through to the local economy. In the case of municipal pollution control projects, the affected community is often the immediate municipality.

However, in some cases a community might be a central location serving the needs of the larger surrounding rural area; in such cases the affected community can be considered people living in a radius around the community (e.g., up 30 miles away).

- The definition of a resident used for these test is that used by the Montana Department of Commerce Census and Economic Information Center. During the census, a person declares their primary residency as that place where “they spend most of their time.”
- The secondary tests are set out in EPA Work Sheet F with the following changes (see attached):
 - Drop the debt indicator and the second financial management indicator (the property tax collection rate over last ten years);
 - Assess both the poverty rate and the low-to-medium income (LMI) index as one of the socio-economic indicators, pending assurance that LMI data are available;
 - Change the first listed financial management indicator to include the sum of property tax and fee revenues per an income measurement (e.g. per capita household median income) rather than as a percent of full market value of taxable property.
- If application of the modified Worksheet F tests indicate that costs on the community would be substantial, or on the border between substantial and insubstantial, then the widespread test as recommended by the NCAAG would be applied. See the attached widespread test.
- An affordability variance would be granted if these tests determine that the costs on the community would be both substantial and widespread.

Tiered Approach to the Limits of Technology - In addition to an affordability variance, DEQ is considering providing a variance from the nitrogen and phosphorus numerical nutrient standards if an affordable nutrient removal technology capable of complying with the standards is not available. The NCAAG considered but did not adopt a three-tiered approach to the technology variance

1% Cost Cap - Those members that participated in the January 2009 meeting agreed unanimously to support a 1% of MHI cost cap for the affordability variance. Given that a community has demonstrated that it would incur both substantial and widespread economic impact from trying to comply with numeric nutrient standards, this means that total pollution control costs per household equal to 1% of the MHI are deemed bearable. The community would be expected to upgrade their wastewater treatment system for nutrient removal to that cost level. The actual cost per individual will vary from community to community as a function of each community’s MHI. The reasons for selecting the 1% MHI threshold follow:

- It is apparently minimum value acceptable to EPA for granting a variance;
- The current economic downturn will make imposing new costs on cities and their waste water customers difficult;
- Several NCAAG members want to see progress on addressing non-point sources along with new requirements on point sources; and
- Details remain to be worked out regarding permitting, for example a multi-disciplinary approach.

It was also made clear during the NCAAG meetings that the variance is *only* for relief from the cost of meeting numeric nutrient water quality standards. Cost for meeting the EPA’s National Secondary Treatment standards (required by EPA) or other water quality standards would not be eligible for a variance under this process. So, for example, if a community needed to spend 1.8%

of median household income just to comply with the National Secondary Treatment standards, they would be asked to do so; however, they would not be asked at that time to do *additional* treatment for nutrient removal, as they have already exceed the 1% MHI cap established via the nutrient-standards variance process.

Private Entities

For private entities discharging to surface water, the affordability test recommended by EPA would include assessing the impact of the standards on net profitability and on the importance of the discharger to the community. At the February 11, 2009 NCAAG meeting, DEQ agreed to consider alternatives to the EPA profit focused approach for a private sector affordability variance, perhaps using an alternative and best available technology, i.e., limits of technology, and report back to the group at the next meeting.